

II. REMARKS

A. Introduction

In this Office Action claims 1-6 are noted as pending and are rejected based on prior art.

In summary of this Response, claims 1-6 are canceled, new claims 7 and 8 are added, and remarks are provided.

B. Telephone Interview

On March 17, 2005, the undersigned spoke to the Examiner regarding boxes 9-10 of the "Office Action Summary" being checked, but the "Detailed Action" lacking any discussion of the reasons. The Examiner indicated that boxes 9-10 were erroneously checked and should be ignored.

C. Request for Acknowledgement

Applicant's records indicate the claim for priority and the certified copy of the priority document were filed March 19, 2002, but same have not been acknowledged in the Office Action. Acknowledgement is respectfully requested.

D. Rejection of Claims

Claims 1 and 4 have been rejected as being anticipated by Maroney, U.S. Patent No. 6,681,079. Claims 1-6 have been rejected as being made obvious by a combination of Yoneyama, U.S. Patent No. 5,535,037, and Wu, U.S. Patent No. 6,423,963.

Claims 1-6 have been cancelled, so these rejections are moot. Nonetheless, it is respectfully submitted that the present invention, as recited by new claims 7-8, was neither anticipated nor not made obvious by the cited prior art for the following reasons.

As recited in new independent claim 7, the invention includes first and second repeaters which are optically connected by a first optical transmission line transmitting a first optical main signal from the first receiver to the second receiver, and a second optical transmission line transmitting a second optical main signal from the second receiver to the first receiver. Maroney shows optical amplifiers (5-10) connected only by a single optical transmission line (2₁ or 2₂). Maroney fails to disclose at least two repeaters connected by two optical transmission lines for two way traffic signals. Also, Maroney is not capable of using fault occurrence recognizing parts to shut down a first or second amplifier, respectively, depending upon the receipt/non-receipt of

first and second pump lights, respectively. See, for example, column 2, lines 51-62 and column 3, lines 1-12 of Maroney.

Further, Yoneyama, like Maroney, does not relate to first and second repeaters optically connected by first and second optical transmission lines. In addition, the Office Action admits that Yoneyama differs from the invention previously recited by claim 1, since it fails to teach that a fault occurrence recognizing part recognizes occurrence fault if the fault occurrence recognizing part fails to receive the pump light. Such first and second fault occurrence recognizing parts are recited in claim 7.

In regard to the latter shortcoming of Yoneyama, Wu is cited for determining the occurrence of a cut in the fiber by detecting the presence of a supervisor signal (204, Fig. 2). Wu, however, like Yoneyama and Maroney, also fails to show two repeaters connected by first and second transmission lines sending main signals in opposing directions. Thus, even though Wu suggests the use of a pump light to detect a break in a single transmission line shown therein, Wu fails to compensate for the inadequate teaching of Yoneyama.

III. CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that claims 7-8 are now in condition for allowance.

If there are any additional fees associated with this Response, please charge same to our Deposit Account No. 19-3935.

Finally, if there are any formal matters remaining after this Response, the undersigned would appreciate a telephone conference with the Examiner to attend to these matters.

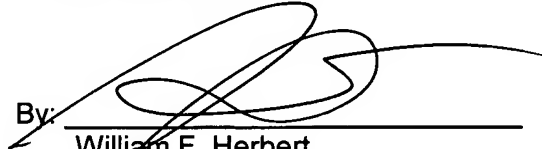
Respectfully submitted,

STAAS & HALSEY LLP

Date:

6/22/05

By:



William F. Herbert
Registration No. 31,024

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

Amendments to the Drawings:

The attached sheets of drawings includes changes to Figs. 1 and 13. These sheets replace the original sheets including Figs. 1 and 13.

In Figure 1, step "S2" described in the written description is added. In Fig. 13, the step "S84" (upper occurrence) is corrected to --S83--, consistent with the written description.

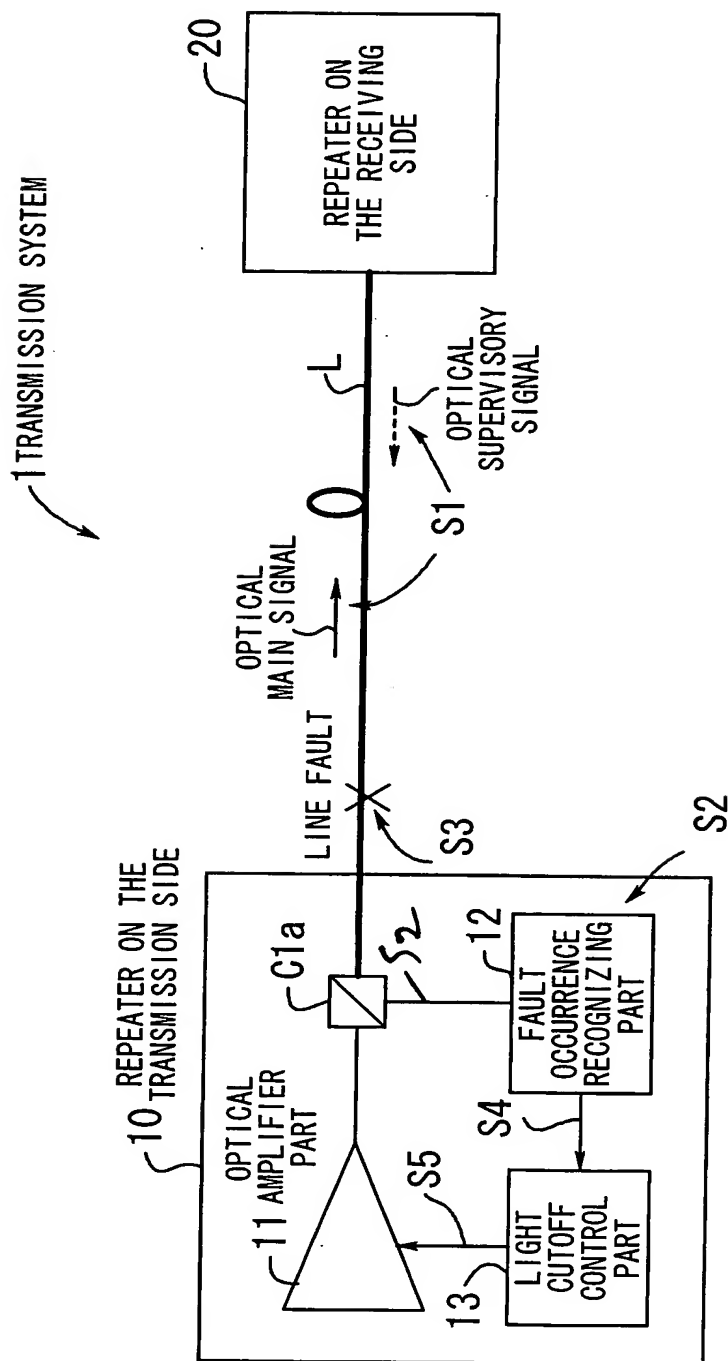


FIG. 1

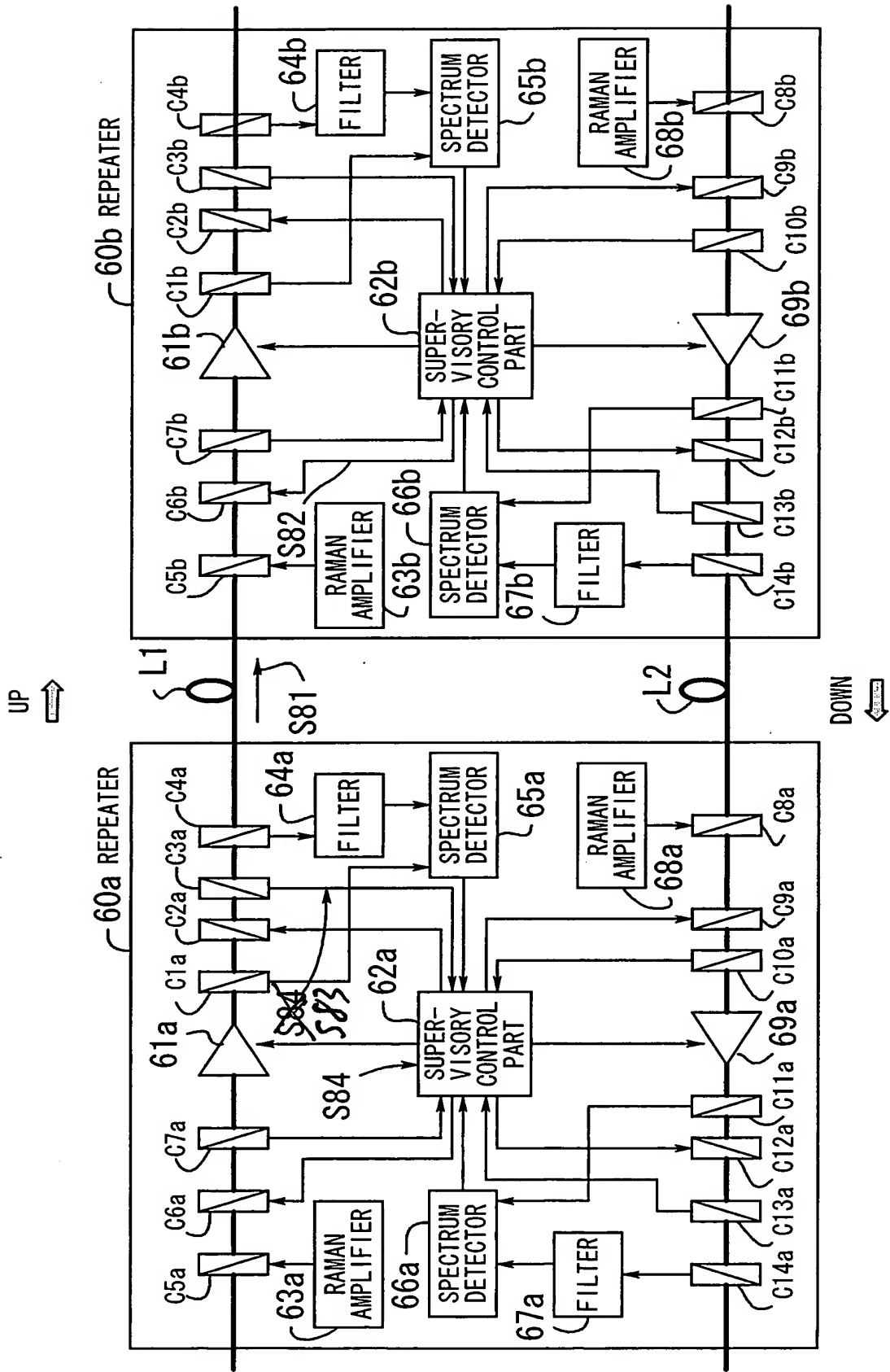


FIG. 13

